

In the Claims:

1. (Original) A conductor structure for electronic component applications formed by metal deposition, comprising:

a substrate, having at least one exposed surface;

a first conducting layer, disposed on the exposed surface of the substrate, the first conducting layer having an exposed surface not in contact with the previously exposed surface of the substrate;

a selective passivation layer, capable of penetration by previously selected materials and not penetrable by other selected materials deposited on the exposed surface of the first conducting layer; and

a second conducting layer, comprising a material capable of penetrating through the selectively passivating layer, the second conducting layer deposited on the selective passivation layer and permeating therethrough displacing the selective passivating layer,

wherein the selective passivating layer remains substantially on the surface of the second conducting layer such that the first and second conducting layers are adhered while protected from other ambient conditions by the selective passivation layer.

2. (Original) The conductor structure of Claim 1 wherein the substrate comprises at least a portion of an integrated circuit wafer ready for the application of a conductor structure for the purpose of electrically interconnecting two or more integrated circuit components.

3. (Original) The conductor structure of Claim 1 wherein the first conducting layer is ruthenium.

4. (Original) The conductor structure of Claim 1 wherein the selective passivation layer is iodine.

5. (Original) The conductor structure of Claim 1 wherein the second conducting layer is copper.

6.-27. (Canceled)

28. (Original) A conductive structure comprising:
a first conductor;
a plurality of atomic layers of a second conductor directly on the first conductor; and
a first material directly on the plurality of atomic layers of the second conductor, remote from the first conductor, the first material being penetrable by the plurality of atomic layers of the second conductor relative to at least a second material other than the second conductor.
29. (Original) A structure according to Claim 28 wherein the first conductor comprises a platinum group metal, the first material comprises a halogen, the second conductor comprises a metal and the second material comprises oxygen.
30. (Original) A structure according to Claim 28 further comprising a substrate on the first conductor, remote from the plurality of atomic layers of the second conductor.
31. (Original) A structure according to Claim 30 wherein the substrate comprises an integrated circuit wafer.
32. (Original) A structure according to Claim 28 wherein the first material comprises about a monolayer of the first material.
33. (Original) A conductive structure comprising:
a first layer comprising ruthenium;
a second layer comprising a plurality of atomic layers of copper directly on the first layer comprising ruthenium; and
a third layer comprising iodine directly on the second layer comprising a plurality of atomic layers of copper, remote from the first layer comprising ruthenium.

34. (Original) A structure according to Claim 33 wherein the third layer comprises about one monolayer of iodine.

35. (Original) A structure according to Claim 33 further comprising a substrate on the first layer, remote from the second layer .

36. (Original) A structure according to Claim 35 wherein the substrate comprises an integrated circuit wafer.